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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

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Technology Center 2100

Application Number: 09/921,003
Filing Date: August 01, 2001
Appellant(s): KILLMER, MARK

Robert A. Voigt, Jr. – Reg. No. 47,159
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 13 September 2006 appealing from the Office action mailed 15 March 2006.

In response to the remand on 24 July 2007 by the Board of Patent Appeals and Interferences, the following examiner's answer is hereby provided and replaces the previous examiner's answer.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|--------------|-------------------|---------|
| 2003/0212863 | Ganguly et al. | 11-2003 |
| 6,301,609 | Aravamudan et al. | 10-2001 |
| 6,662,206 | Banavar et al. | 12-2003 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4, 6-7, 9, 11-12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ganguly et al., (hereinafter Ganguly), US 2003/0212863.

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As per claims 1, 6, and 11, Ganguly teaches a client-server environment, a method for providing transparency in a gateway of an IP network comprising the steps of:

interrogating a directory (Fig 3, item 312; Fig 9, item 900) comprising proxy server protocol data specific to every end-user network account of said IP network (Fig 9, item 900; [0125-0126]; The data which the users are querying on servers or proxy are account specific. According to [0013], the data themselves are based on employee IDs, email, residential address, contacts, salary, and various projects; furthermore, proxy server uses predicate logic in an attempt to find out if the data is available locally in order to quickly storing and retrieving service data. Data available on the proxy is generally elaborate as it contains names of the client, company, and are accessible by IDs that are stored in non-persistent memory [0041]);

retrieving parameters (Fig 9, item 904-914) associated with a proxy server protocol data for a first end-user in response to an access request from a client application of said first end-user ([0030-0031], parameters are requests by the clients; [0040], predicates that make sense out of query; [0049]; [0126-0127], where the predicates are matched up with the values on the Backend Configuration Table of Fig. 9).

accessing an application server on behalf of said client application in accordance with said retrieved parameters for said first end-user ([0049]; [0127]).

relaying data between said client application and said application server ([0039]).

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As per claims 2, 7, and 12, Ganguly teaches the step of creating, in said gateway of said IP network, a directory including entries for every end-user on said IP network ([0013-0014]; [0030-0031]; Fig 4, item 404; Fig 7, item 700).

As per claims 4, 9, and 14, Ganguly teaches wherein the step of retrieving parameters associated with proxy server protocol data for said first end-user includes the steps of:

obtaining leading data from said client application having issued said request for said end-user ([0017], leading data is the request/query/predicate);
parsing said leading data ([0030], request analyzed to determine a predicate used to index directory cache);

determining a protocol said client application is currently using ([0005]; [0063]; [0068]);

interrogating said directory at an entry corresponding to said first end-user ([0039]; [0126-0127]);

retrieving parameters associated with said request ([0040]; [0049]; [0126]); and
executing said protocol in accordance with said parameters associated with said protocol ([0040-0041]; [0127]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganguly, as applied in claims 1, 6 and 11 above, in view of Aravamudan et al. (hereinafter Aravamudan), US 6,301,609.

As per claims 3, 8, and 13, Ganguly teaches the step of updating, in said gateway of said network, the directory of said end-users, said step of updating the directory including the steps of:

updating said entries whenever said parameters are changing while connected (Ganguly, [0043], predicate logic table is updated as new searches is queried by the user).

Ganguly does not explicitly teach:

said entries of said end-users comprising dynamic parameters;

enabling entries for those of said end-users that connect; and

disabling entries for those of said end-users that disconnect.

However, Aravamudan teaches:

updating said entries of said end-users comprising dynamic parameters whenever said parameters are changing while connected (see col. 7 lines 49-59, *the user's status is continuously monitored while connected and when the status changes, the server is notified and the database updated*);

enabling entries for those of said end-users that connect (Aravamudan, col. 2 lines 40-49, col. 8 lines 1-30, col. 10 lines 1-15, *when assigned a high priority, the*

associate would know when a user has an online status. In order to know an online status, the database entry for that user must be modified to include its online status); and

disabling entries for those of said end-users that disconnect (Aravamudan, col. 2 lines 40-49, col. 8 lines 1-30, col. 10 lines 1-15, *when assigned a high priority, the associate would also know when a user is not online by virtue of the fact that the associate knows when the user is online*) wherein system of Aravamudan discloses of a proxy chat system where the users' online status information are stored in a remote centralized repository, this is important in a chat system to maintain user's privacy and making sure the contact list has updated information.

Combining Ganguly and Aravamudan would have been obvious to one of ordinary skill in the art at the time of invention because both Aravamudan and Ganguly have a similar network set up, i.e. both have users requesting information via a proxy. Modifying Ganguly to include Aravamudan's user connection status information would improve the system by ensuring that replies to requests are sent to clients with an active connection. Aravamudan describes this benefit by describing how a user's status is monitored (col. 7 line 49 – col. 8 line 4) and when information is sent to the user (col. 7 lines 21-26, col. 8 line 56 – col. 9 line 18).

Claims 5, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganguly, as applied in claims 1, 6 and 11 above, in view of Banavar et al. (hereinafter Banavar), US 6,662,206.

As per claims 5, 10, and 15, Ganguly does not explicitly teach the step of informing said end-user of said client application that a server application is unavailable if a link to said application server is not established.

However, Banavar teaches the step of informing said end-user of said client application that a server application is unavailable if a link to said application server is not established (Banavar, Col. 2, lines 27-40; Col. 1, lines 55-67; Col. 8, lines 1-10).

It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Ganguly and Banavar because the teaching of Banavar to allow the step of informing said end-user of said client application that a server application is unavailable if a link to said application server is not established would improve the failure analysis for Ganguly's system by monitoring the link in a real time basis to detect any potential link failures (Banavar, Col 2 lines 1-5)

(10) Response to Argument

Applicant argues that Ganguly and Ganguly-Aravamudan do not teach the claim limitations of claims 1-4, 6-9, and 11-14.

Independent Claim Analysis: Claim 1 is a method in which ultimately a proxy entity, e.g. router or gateway or proxy server, relays data between a client application and an application server. Before data can be relayed between these two entities, a proxy entity queries a directory that contains data, i.e. proxy server protocol data, specific to every end-user network account on an IP network. The client application of an end-user

also requests access somewhere – most likely to the application server, but the possibility also exists that the client application requests access to the proxy entity instead of or in addition to requesting access to the application server. Then the proxy entity retrieves parameters for the end-user in response to the access request and accesses the application server on behalf of the client application. At this point data can be relayed between the client application and the application server. This is only one interpretation of claim 1 since the language of the claim limitations leaves the possibilities open for other configurations, e.g. application queries the directory directly.

Claims 6 and 11 are a data processing system and a computer program product corresponding to the method of claim 1.

With reference to the appealed claims 1, 6, and 11, appellant has not explained “interrogating a directory” to mean anything other than querying a directory (see specification p. 11 lines 21-27, p. 12 lines 6-11 and 24-25) and Ganguly clearly disclosed querying a directory ([0030], [0049]).

The claim further explains that the directory contains proxy server protocol data specific to every end-user network account of an IP network. Appellant has not explained “proxy server protocol data” to be anything more than application data that contains information about the protocols being used and any other information needed to process the application data (specification p. 12 lines 6-9). Ganguly disclosed when the client application issued a query, the predicate logic located in the proxy cache server received and translated the query ([0030], [0040], [0044]). The query may be

sent in various protocols and the predicate logic must be able to understand all of the protocols in order to be able to translate the query ([0063], [0068]). Ganguly also disclosed the data that the users are querying are account specific since the data themselves are based on employee IDs, email, residential address, contacts, salary, and various projects ([0013]).

Continuing with the remaining claim limitations, when issuing a query, the query parameters are what information is desired, e.g. name = "john" ([0056]). The query is written in a protocol and the parameters passed in the query are written according to a protocol. Therefore the parameters are associated with the protocol data. Ganguly described the proxy server accessing the directory server for the client application ([0030], [0049], [0127]). If the client sent an LDAP request, the proxy server accessed an LDAP server ([0040]). This is then in accordance with the parameters retrieved from the client's query. Appellant has not explained a different interpretation in the specification of how parameters are associated with proxy server protocol data or of how the retrieved parameters determine how the application server is accessed on behalf of the client application.

As a quick digression, sockets are used when establishing connections and contain protocol data. Therefore sockets may contain proxy server protocol data.

With reference to appealed claims 2, 7, and 12, the claims describe creating a directory in a gateway and the directory contains entries for every end-user on the IP network.

Ganguly described databases and directories containing human resources information for every employee ([0013]-[0014]). These directories had to be created at some point before being able to query and access the information stored thereon. Furthermore, when a client issued a query, the query is first sent to a proxy server, which searches its own cache memory for the queried data (fig. 4, [0030], [0049]). Besides storing recently accessed data, the proxy's cache memory also stores pointers to every directory or database and also descriptions of the information stored in each directory or database ([0101]-[0105]).

With reference to appealed claims 3, 8, and 13, the claims describe updating the directory. This includes disabling entries when a user disconnects, enabling entries when a user connects, and updating a user's parameters when the parameters are changed while connected. Ganguly described updating the directory in the proxy server while the end-user is connected ([0043]). Aravamudan disclosed a similar network setup in which a database stores client-specific information (fig. 1 #160, col. 4 lines 26-33, 51-53, col. 5 line 61 – col. 5 line 2, col. 9 lines 52-57) at a gateway or other intermediary node (col. 4 line 65 – col. 5 line 2, col. 5 line 61 – col. 6 line 2). The database is updated (fig. 5 #238) and entries are enabled and disabled for end-users that connect and disconnect respectively (col. 2 lines 40-49, col. 8 lines 1-30, col. 10 lines 1-15). When assigned a high priority, the associate would know when a user has an online status. In order to know an online status, the database entry for that user must be modified, i.e. enabled, to include its online status. The reverse is also true.

When assigned a high priority, the associate would also know when a user is not online by virtue of the fact that the associate knows when the user is online. Furthermore, the user's status is continuously monitored while connected and when the status changes, the server is notified and the database updated (col. 7 lines 49-59).

Combining Ganguly and Aravamudan would have been obvious to one of ordinary skill in the art at the time of invention because both Aravamudan and Ganguly have a similar network set up, i.e. both have users requesting information via a proxy. Modifying Ganguly to include Aravamudan's user connection status information would improve the system by ensuring that replies to requests are sent to clients with an active connection. Aravamudan describes this benefit by describing how a user's status is monitored (col. 7 line 49 – col. 8 line 4) and when information is sent to the user (col. 7 lines 21-26, col. 8 line 56 – col. 9 line 18).

With reference to appealed claims 4, 9, and 14, the claims describe obtaining and parsing leading data from the client that sent the request, determining which protocol the client is using, querying the directory for the client's information, retrieving parameters associated with the protocol being used by the client, and executing the protocol. The claims do not specify details for leading data or for the client's information nor what parameters are associated with the client's protocol.

Ganguly disclosed receiving a request from the client ([0017], [0030], [0044]). The request is analyzed and contains information about the client sending the request. Since the requests may be sent in a variety of protocols ([0063], [0068]), the proxy

server must be able to identify which protocol the client is using. The proxy server attempts to fulfill the client's request locally by searching through the local storage ([0039]). Also, no particular details are provided in the claims to specify from where the parameters associated with the request are retrieved, so the proxy server may retrieve these parameters from the request itself when the request is being analyzed ([0030]). The query parameters are what information is desired, e.g. name = "john" ([0056]). The query is written in a protocol and the parameters passed in the query are written according to a protocol. Therefore the parameters are associated with the protocol data. Ganguly described the proxy server accessing the directory server for the client application ([0030], [0049], [0127]). If the client sent an LDAP request, the proxy server accessed an LDAP server ([0040]). This is then executing the protocol in accordance with the parameters retrieved from the client's query. Appellant has not explained a different interpretation in the specification of how parameters are associated with proxy server protocol data or of how the retrieved parameters determine how the application server is accessed on behalf of the client application.

With reference to claims 5, 10, and 15, Appellant states that Ganguly-Banavar is an improper combination according to 35 U.S.C. 103(c) because Banavar and the instant application had a common assignee, i.e. International Business Machines Corporation, at the time of invention.

This evidence is not entered as a matter of right. See 37 CFR 41.33(d) and MPEP §1206(II). The same citations in Banavar have been used to reject claims 5, 10,


and 15 in all office actions since 9 September 2004 and this use of 35 U.S.C. 103(c) did not come up during previous prosecution.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

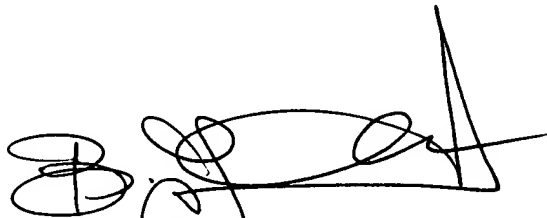
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

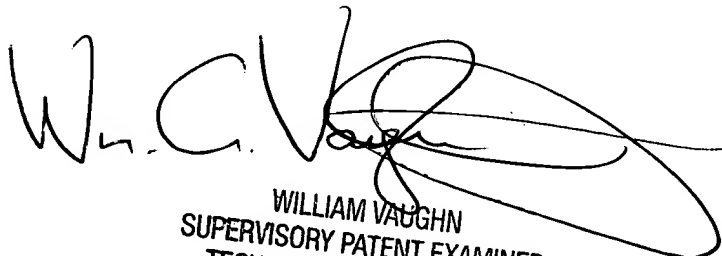

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Dated: 3 August 2007

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